

**CLAIMS**

1. A method for fabricating a focusing cup for an optoelectronic device package comprising the steps of:

forming a through hole in an upper insulating substrate;  
stacking said upper insulating substrate over a lower insulating substrate; and  
mounting an optoelectronic device on said lower substrate inside said through hole.

Sub A1 > 2. The method as described in claim 1, wherein said through hole is of conical shape.

3. The method as described in claim 2, wherein said through hole has larger top than a smaller bottom.

4. The method as described in claim 2, wherein said through hole has a smaller top and a larger bottom.

5. The method as described in claim 1, wherein said through hole is of cylindrical shape.

6. The method as described in claim 1, wherein said optoelectronic device has two top electrodes wire-bonded respectively to two bonding pads mounted on top of said upper substrate.

7. The method as described in claim 1, further comprising a step of inserting a metallic plate between said optoelectronic device and said lower substrate to enhance light reflection.

8. The method as described in claim 7, wherein said metallic plate is folded to the bottom of said lower substrate to enhance heat removal.

Sub A2 > 9. The method as described in claim 1, further comprising the step of lining the wall of said through hole with metal coating to enhance light reflection.

10. The method as described in claim 7, further comprising a step of lining the wall of said through hole with metal coating to enhance light reflection.

11. The method as described in claim 8, further comprising a step of lining the wall of said through hole with metal coating to enhance light reflection.

12. The method as described in claim 1, wherein said optoelectronic device has two bottom electrodes, each bonded to a metallic plate to enhance light reflection and folded to the bottom of said lower substrate to enhance heat removal.

13. A package for optoelectronic device comprising:

an upper insulating substrate;  
a lower insulating substrate;  
a through hole in said upper insulating substrate;

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an optoelectronic device mounted on said lower substrate and inside said through hole:

Sub A4 > 14. The package as described in claim 13, further comprising a metallic base plate inserted between said optoelectronic device and said lower substrate to enhance light reflection.

15. The package as described in claim 14, wherein said metallic base plate is folded over the lower substrate to enhance heat removal.

Sub A5 > 16. The package as described in claim 13, further comprising metal lining coated over the wall of said through hole to enhance light reflection.

17. The package as described in claim 13, further comprising at least two metallic base plates inserted between said optoelectronic device and said lower substrate to enhance light reflection.

18. The package as described in claim 17, wherein said optoelectronic device has two bottom electrodes each coupled to one of said metallic base plate.

TO DO: Add A6